FINAL PROJECT

PROTOTYPE AUTOMATIC WATER FAUCET BASED OP-AMP

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ABSTRACT

The goal of the final project is to get some conceps more economical, efficient, and effective to build concep of hand wash, obtain an effective minimalist electronic series and know to work Prototype-Based Automatic Water Faucet Op-Amp.

Prototype Design of Automatic Faucet Water-Based Op-Amp consists of 7 main parts, namely: a string of power supply, *limit switch* sensor, comparator as a processor, and a DC motor *driver*. Prototype Design of Automatic Faucet Water-Based Op-Amp.This involves several stages, that is (1) Identification of needs, (2) Analysis of needs, (3) hardware and series design, (4) Preparation, and (5) Testing.

Results of tests performed, it is known that the performance of Prototype-Based Automatic Water Faucet Op-Amp. This can work well in the water flow when there is no response from the sensor. Best sensor response that is at a distance of 5 cm with a time delay for 2 seconds.Parameters on the comparator reference voltage is 3 volts for comparator 1; 3.5 Volt to comparator A, and 3.7 Volt for comparator B. From the test results with the load, 5 Volt voltage regulator circuit voltage decreased by 0.1 Volt, which was originally 5.1 Volt to 5 Volt.

Keywords:*automatic water faucet, Op-amp.*